

REMARKS

Claims 1-21 and 24-27 are pending in the application. Claims 1, 11, 20 and 24 are amended, and claims 22-23 are canceled with this response. Applicants note with appreciation the provisional allowance of claims 3-8, 14, 18, 19 and 23-27. Reconsideration of the application is respectfully requested based on the following remarks.

I. REJECTION OF CLAIMS 20-22 UNDER 35 U.S.C. § 102(b)

Claims 20-22 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Publication No. 2004/0037378 (Komori). Claim 20 has been amended to include the limitations of allowable claim 23, along with intervening claim 22. Claims 22 and 23 have been canceled. Therefore claims 20-21 are believed to be in condition for allowance. Accordingly, withdrawal of the rejection is respectfully requested.

II. REJECTION OF CLAIMS 1 and 11 UNDER 35 U.S.C. § 103(a)

Claims 1 and 11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,904,290 (Palenius). Withdrawal of the rejection is respectfully requested for at least the following reasons.

- i. Palenius does not teach or suggest a control device that sets the bandwidth of the amplifier device to a value as small as possible without corrupting the amplified data signal, as recited in claim 1.***

Claim 1 is directed to a receiver circuit that comprises an amplifier device that is configured to amplify a data signal. The receiver circuit further comprises a control device that measures the data rate of the data signal, and sets a bandwidth of the amplifier device to correspond to the data rate. Further, the control device sets the bandwidth to be as small as possible without the data signal being corrupted during amplification. Palenius does not teach this feature.

Palenius does teach in Fig. 3 and related text a receiver circuit having a processor 25 that uses quality measurements (*e.g.*, bit error rate (BER) and frame error rate (FER)) to adjust power offset values. (*See, e.g.*, Col. 5, lines 18-22). A power level controller 29 receives the power offset values from the processor 25 and controls both uplink and downlink transmit power in response thereto. (*See, e.g.*, Col. 5, lines 23-32). While the Office Action is correct that output power and bandwidth are related (such that changes in output power results in a change in bandwidth), ***the adjustment in the output power is not controlled specifically to reduce the amplifier bandwidth as much as possible without signal corruption as claimed.***

More particularly, details as to how the output power is controlled is provided in the text accompanying Fig. 7. In Col. 8, lines 40-59, Palenius teaches an adjustment of the ratio of output power between at least two different channels depending on the data rate (*see* Fig. 7) in order to reduce noise, without any consideration as to how this adjustment affects the bandwidth. Further, as would be appreciated by one of ordinary skill in the art, adjusting the bandwidth of one of the channels to the smallest possible value would actually be discouraged by Palenius, because the cited reference seeks to optimize (in terms of reducing overall noise) the power ratio between different signal channels. Setting the bandwidth for one of the channels to the smallest possible value (as recited in claim 1) would dictate a power ratio between the channels that would not result in optimization with respect to overall noise.

Therefore not only does Palenius not disclose the feature of claim 1, but one of ordinary skill in the art would not be motivated to modify Palenius in accordance with the claimed invention because such a modification would frustrate a purpose of the cited art to optimize the power ratio between multiple channels with respect to overall noise.

Therefore claim 1 is non-obvious over the cited reference. Accordingly, withdrawal of the rejection is respectfully requested.

ii. Palenius does not teach or suggest setting the bandwidth of the amplifier device as small as possible without corrupting the amplified data signal, as recited in claim 11.

Claim 11 is directed to a method of operating a receiver circuit, and comprises setting a bandwidth of an amplifier device so that the amplifier device corresponds to a measured data rate. In addition, the bandwidth is set as small as possible without the data signal getting corrupted during amplification by the amplifier device. As highlighted above in the discussion with respect to claim 1, Palenius neither teaches nor suggests this feature. In addition, one of ordinary skill in the art would not be motivated to modify the cited reference in accordance with the present invention because doing so would frustrate a purpose for which output power is varied (*i.e.*, to reduce overall noise). Therefore claim 11 is non-obvious over the cited art. Accordingly, withdrawal of the rejection is respectfully requested.

III. REJECTION OF CLAIMS 2, 9-10, 12, 13 AND 15-17 UNDER 35 U.S.C. § 103(a)

Claims 2, 9-10, 12, 13 and 15-17 were rejected under 35 U.S.C. § 103(a) as being obvious over Palenius in view of Komori. Claims 16 and 17 were rejected as being obvious over Palenius view of Komori and further in view of U.S. Publication No. 2004/0142670 (Ciccarelli). Claims 9-10 were rejected as obvious over Palenius in view of Ciccarelli. Withdrawal of the rejection is respectfully requested for at least the following reasons.

As stated above, Palenius does not render obvious the inventions of claims 1 and 11, respectively. Claims 2 and 9-10 depend upon claim 1 respectively, and adds further limitations thereto. Claims 12, 13, 15, 16, and 17 depend upon claim 11 respectively, and add further limitations thereto. Because the primary reference does not teach the inventions of independent claims 1 and 11, and since Komori and Ciccarelli fail to remedy the deficiencies in the primary reference, claims 2, 9-10, 12, 13, and 15-17 are also non-obvious over the cited art. Accordingly, withdrawal of the rejection is respectfully requested.

IV. CONCLUSION

For at least the above reasons, the claims currently under consideration are believed to be in condition for allowance.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should any fees be due as a result of the filing of this response, the Commissioner is hereby authorized to charge the Deposit Account Number 50-1733, MAIKP172US.

Respectfully submitted,
ESCHWEILER & ASSOCIATES, LLC

By /Thomas G. Eschweiler/

Thomas G. Eschweiler
Reg. No. 36,981

National City Bank Building
629 Euclid Avenue, Suite 1000
Cleveland, Ohio 44114
(216) 502-0600